# Before the Federal Communications Commission Washington, DC 20554

In the Matter of	)	
	)	
Service Rules for Advanced Wireless	)	WT Docket No. 02-353
Services in the 1.7 GHz and 2.1 GHz Bands	)	

## COMMENTS OF UNITED STATES CELLULAR CORPORATION

Respectfully submitted,

UNITED STATES CELLULAR CORPORATION

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#### Summary

United States Cellular Corporation ("U.S. Cellular") supports the adoption of service and licensing rules for 1.7 GHz and 2.1 GHz ("1.7 GHz/2.1 GHz") spectrum which encourages new and expanded next-generation wireless services by incumbent wireless carriers as well as new entrants. The Commission should take this important opportunity to adopt specific rules and policies responsive to the rural service initiatives in its Spectrum Policy Task Force recommendations and its statutory mandate in Sections 309 (j)(3)(B) and 309 (j)(4)(B) and (C) of the Communications Act ("Act").

U.S. Cellular proposes that Economic Area ("EA") or smaller service areas such as Metropolitan Statistical Areas ("MSA") and Rural Service Areas ("RSA") be adopted in 10 MHz blocks for at least 30 MHz of the 1.7 GHz/2.1 GHz spectrum. This would give regional and rural carriers a fair opportunity to compete for next-generation spectrum resources while preserving opportunities for carriers with national or super regional coverage needs to bid for the remainder of this spectrum. U.S. Cellular strongly opposes exclusive use of nationwide, Regional Economic Area Grouping ("REAG") or Major Economic Area ("MEA") Licensing.

The Commission should restrict the initial aggregation of 1.7 GHz/2.1 GHz spectrum so that winning bidders may only be granted a maximum of 20 MHz in the same geographic area. Such restrictions will help guard against competitive abuses, improve auction efficiency, diminish the Commission's application processing workload, and avoid unnecessary delays in the early deployment of

advanced services in the event competitive issues are left to be resolved on a caseby-case basis, subject to Section 309(d) of the Act.

U.S. Cellular also supports open eligibility and use of simultaneous multiple round auction methodologies without package bidding features. In the event the Commission chooses to use its new package bidding procedures, it should not use them for EA or MSA/RSA licensing and should restrict their use to the largest geographic license sizes, such as REAG or MEA areas.

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## COMMENTS OF UNITED STATES CELLULAR CORPORATION

United States Cellular Corporation on behalf of itself and its subsidiaries (collectively "U.S. Cellular"), by its attorneys, submits its comments in response to the Commission's Notice of Proposed Rulemaking (FCC 02-305) released November 22, 2002 ("Notice").

#### **Introduction**

U.S. Cellular strongly supports the Commission's decision to allocate additional spectrum for new advanced wireless services, including so-called Third Generation ("3G") services. We agree with the Commission's observations that the 90 MHz of spectrum which is the subject of this rulemaking will be an important resource for mobile telephone carriers to be able to deploy next-generation mobile

services which support data applications.<sup>1</sup> We also urge the Commission to move quickly in ET Docket No. 00-258 to allocate additional bands to add to the 90 MHz of spectrum proposed to be licensed subject to the rules and policies outlined for comment in this Notice.

We are encouraged by the Commission's recent focus in its Spectrum Policy
Task Force Report on the use of "...licensing areas that distinguish between rural
and urban areas so that rural interests can more readily acquire spectrum in the
areas they serve."

The Commission's subsequent Notice of Inquiry³ in WT Docket
No. 02-381 recites the Commission's statutory mandate to encourage new and
expanded rural service as provided in Section 309(j) of the Communications Act of
1934. The adoption of service rules for the 1.7 GHz and 2.1 GHz bands affords the
Commission an important opportunity to respond to these Task Force
recommendations and to address the Commission's statutory mandate to encourage
new and expanded wireless services in rural areas.

¹ Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, Second Report and Order, ET Docket No. 00-258 (FCC 02-304), released November 15, 2002, ¶ 12.

<sup>&</sup>lt;sup>2</sup> Spectrum Policy Task Force Report ("Report") [FCC 02-322], *ET Docket No. 02-135*, released November 15, 2002, pp. 58-60. See also Recommendation 37.a., Report, p. 68.

<sup>&</sup>lt;sup>3</sup> Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services, *Notice of Inquiry*, WT Docket No. 02-381 [FCC 02-328], released December 20, 2002, ¶ 2.

As an incumbent mobile telephone carrier already serving regional and rural market clusters, we propose that service, licensing and technical rules be adopted for the 1.7 GHz and 2.1 GHz ("1.7 GHz/2.1 GHz") spectrum as follows:

- The Commission should adopt Economic Area ("EA") or smaller geographic service areas such as Metropolitan Statistical Areas ("MSA") and Rural Service Areas ("RSA") for at least 30 MHz of the 90 MHz total.
- The Commission's rules should provide for multiple paired channel blocks in
  the 1.7 GHz/2.1 GHz bands including three 10 MHz blocks to be licensed on
  an Economic Area ("EA") or MSA/RSA basis with the remaining 60 MHz to be
  licensed in 10 MHz blocks on a geographic basis such as Regional Economic
  Area Grouping ("REAG") or Major Economic Area ("MEA") areas.
- The Commission should restrict the initial aggregation by any winning bidder of 1.7 GHz/2.1 GHz spectrum to 20 MHz in the same geographic service area.
- The Commission should include all licenses for 1.7 GHz/2.1 GHz spectrum in a single auction and should not use combinatorial or package bidding in any spectrum auction of EA or MSA/RSA licenses for 1.7 GHz/2.1 GHz spectrum.

We also support open eligibility and use of simultaneous multiple round auction methodologies.

#### Discussion

1. Assessment of the Uses to Which the 1.7 GHz/2.1 GHz Spectrum

Are to be Put by Regional/Rural Carriers Supports Adoption of EA

Or MSA/RSA Service Area Sizes for Regional or Local Deployment.

A key factor in the Commission's assessment of appropriate service area size should be the uses to which the 1.7 GHz/2.1 GHz spectrum is likely to be put by the incumbent cellular, PCS and other CMRS providers who are providing essential wireless services in regional and local market areas. We propose that EA or MSA/RSA licensing be adopted to afford opportunities for the earliest possible anticipated uses of 1.7 GHz/2.1 GHz spectrum by customers in regional and rural areas.

Regional/rural carriers are likely to use 1.7 GHz/2.1 GHz spectrum either to expand their footprints or to increase their capacity to provide traditional voice services and new advanced services. In the case of U.S. Cellular which provides commercial mobile services to approximately 4.1 million subscribers through 149 majority-owned and managed systems, this spectrum is a potentially valuable resource to expand services, coverage and capacity in its regional markets. Other regional/rural carriers such as ALLTEL, Western Wireless, Qwest, Centennial, Rural Cellular, Leap Wireless, NTELOS, and others also may use 1.7 GHz/2.1 GHz

spectrum to enhance their established networks serving regional and rural cluster areas where they compete with national and other regional carriers.<sup>4</sup>

From a technical standpoint, the 1.7 GHz/2.1 GHz spectrum is well suited either to expand the services and footprints or to increase the capacity of established regional and rural carriers. It has propagation and other technical characteristics which enhance its value for this purpose. For example, there are significant cost efficiencies from using such spectrum at existing base station sites to expand existing capacity to accommodate 3G and other advanced services.

Incumbent providers like U.S. Cellular and others need realistic opportunities to bid for 1.7 GHz/2.1 GHz licenses so that they can expand the technologies and services available to consumers in the areas they serve. Adoption of EA or possibly MSA/RSA service areas for 1.7 GHz/2.1 GHz spectrum will help promote, through market-based approaches, competitive deployment of advanced technologies in all areas of the U.S. by giving these important incumbent wireless providers a fair opportunity to compete for necessary spectrum resources.

2. Selection of EA or MSA/RSA Service Area Size for at Least 30 MHz of 1.7 GHz/2.1 GHz Spectrum is an Appropriate Compromise of the Interests of National and Regional/Rural Carriers and Fairly Balances the Interests of Both.

The Commission's selection of EAs or MSA/RSAs as the geographic service area size for at least 30 MHz of 1.7 GHz/2.1 GHZ spectrum would go a long way to meet the needs of regional/rural carriers while preserving opportunities for carriers

<sup>&</sup>lt;sup>4</sup> For additional industry information regarding the market share, coverage and licensed service areas of regional/rural carriers, see Comments of U.S. Cellular filed in response to the Commission's Notice of Inquiry in WT Docket No. 02-381 on February 3, 2003, which is adopted by reference here.

with national or super regional coverage needs to bid for the remainder of this spectrum. In this case, EA or MSA/RSA licensing serves the needs of regional/rural carriers to bid efficiently and is flexible enough, if coupled with the ability in the auction to aggregate service areas, to meet expanded regional coverage needs.

The EA or MSA/RSA building block approach which we propose will permit regional/rural carriers like U.S. Cellular and many others to provide an important source of competition, variety and diversity in rural and less densely populated areas. National carriers generally have limited the buildout of their facilities to more densely populated urban areas so that regional/rural carriers are the principal providers of services in areas where national carriers have limited or no interest.

Another reason for the continuing important role of regional and rural carriers as competitors to national carriers is that within any regional market there are numerous consumers who make almost all of their wireless calls within "super cluster" areas which generally correspond to EAs or possibly aggregations of MSA/RSAs. Regional/rural carriers remain effective competitors with national carriers because of the diversity of these consumer needs and because regional/rural carriers have continued to expand coverages in regional areas to match the footprint of the areas where their customers want to originate and receive wireless calls.

We propose EAs or MSA/RSA areas which generally coincide with the regional and local economic footprints of regional/rural carriers. This proposal is not intended to deprive national carriers of a fair opportunity to acquire spectrum

rights to deploy systems over super-regional or even national areas. Under our proposal carriers with business plans to deploy nationwide or super regional networks will still have the opportunity to win licenses covering super-regional or national areas through aggregation of licenses comprising the 60 MHz of spectrum which we propose to be auctioned on an REAG or MEA basis.

3. <u>U.S. Cellular Opposes Exclusive Use of Nationwide, REAG or MEA</u>
Service Areas For 1.7 GHZ/2.1 GHZ Spectrum Which Effectively Excludes
Regional/Rural Carriers From Being Successful Bidders for Any
1.7 GHz/2.1 GHz Spectrum.

The successful strategies of most regional/rural carriers have been founded on building networks that cover the regional economic footprints of the areas where their customers work, shop and reside coinciding with EA or combinations of MSA/RSA areas. Nationwide, REAG and MEA coverages on the other hand are useful to national carriers with a different strategic view and the financial resources to deploy networks on such a large scale. It is this mismatch which makes exclusive use of nationwide, REAG or MEA service area sizes for initial licensing of 1.7 GHz/2.1 GHz spectrum unfair and unworkable for regional/rural carriers. Our proposal attempts to balance the differing needs of different types of potential licensees through the use of a combination of service area sizes for initial licensing.

The problems for regional/rural carriers if the foregoing balanced approach is not adopted and the Commission uses only nationwide, REAG or MEA service area sizes are threefold. Regional/rural firms are either effectively precluded from bidding altogether such as in the case of nationwide licensing or face severe financial challenges to bid for REAG or MEA service areas which far exceed the size

of any area they might want to serve. For example, U.S. Cellular which has widely dispersed network clusters in the six REAGs, comprising the contiguous United States, would have the formidable burden of bidding for licenses in all six REAGs to win the spectrum needed to overlay its existing clusters. Second, even if regional/rural carriers could obtain access to financing to be able to bid, they would be disadvantaged by the disproportionate financial risk (and the associated transactional costs) of disaggregating spectrum in REAG or MEA areas which are not essential to their regional/rural service area plans. Third, the spectrum auction "threshold problem" creates an decisionally significant bias in the selection of winning bidders in favor of national license aggregation even when this is inefficient. In this case this bias unfairly favors nationwide bidders at the expense of regional/rural bidders, a result which is clearly contrary to the Commission's statutory mandate in Section 309(j) and its objectives in this proceeding.

4. If Regional/Rural Carriers are Unable to Bid Directly on
1.7 GHz/2.1 GHz Spectrum, It is Unlikely They will Obtain Timely
and Adequate Access to Spectrum via Partitioning, Disaggregation, or
Secondary Market Relationships.

The foregoing problems of regional/rural carriers to obtain the spectrum rights they need to deploy 1.7 GHz/2.1 GHz systems if they are not afforded the opportunity to bid for EA or MSA/RSA licenses are not avoided by the operation of the Commission's partitioning, disaggregation or secondary markets policies. There is a reasonable likelihood that national carriers acquiring REAG or MEA licenses

<sup>&</sup>lt;sup>5</sup> See the Commission's description of this problem in its Public Notice "Comment Sought on Modifying the Simultaneous Multiple Round Auction Design to Allow Combinatorial (Package) Bidding, DA 00-1075, May 18, 2000 at 2.

will simply choose to warehouse spectrum that they have no near-term plans to use instead of selling it. They will probably conclude that it is less costly to retain unused spectrum rights than to risk that a sale of spectrum rights will deprive a national carrier of spectrum which might be needed at some future date. In addition, it is likely that such national carriers will be focused on deploying technologies and capturing market share in their main markets for at least a two to three year period after 1.7 GHz/2.1 GHz licenses are awarded so that disaggregation and partitioning are simply not options during this period, if ever. The third problem is that such national carriers are highly unlikely to disaggregate and partition spectrum to regional/rural carriers that are actual or potential competitors. In the event they had any interest in disposing of spectrum, these national carriers are more likely only to do so pursuant to affiliate relationships which limit or prohibit competition between the affiliate and that national carrier.

In sum, regional/rural carriers are likely to be precluded, or at a minimum will encounter substantial (and perhaps insurmountable) delays and transactional costs in their attempts to obtain 1.7 GHz/2.1 GHz spectrum rights from national carriers. Our proposed solution, which will enhance competition and promote the early deployment of advanced technologies, is to enable regional/rural carriers to bid directly for EA or MSA/RSA service area licenses in the 1.7 GHz/2.1 GHz spectrum auction.

5. The Commission Should Restrict Initial Aggregation of 1.7 GHz/2.1 GHz
Spectrum by Limiting the Amount of Spectrum to be Initially Licensed
to Any Winning Bidder to 20 MHz in the Same Geographic Area.

U.S. Cellular supports adoption of a spectrum aggregation limit applicable to the initial licensing of 1.7 GHz/2.1 GHz spectrum which would limit to 20 MHz the total of such spectrum that any one entity (or related entities) may acquire at auction in the same or overlapping geographic service areas.

When the Commission decided to sunset its CMRS spectrum aggregation limits in Section 20.6 of its rules, it cited its "...ability to shape the initial distribution of licenses through service rules adopted with respect to specific auctions" as one of the "tools" it could employ to promote competition by limiting CMRS spectrum aggregation.<sup>6</sup> These proceedings offer an important initial opportunity for the Commission to demonstrate its commitment to the preservation of competition and other important goals under the proactive mandates in Section 309(j)(3)(B) and 4(A) and (B) of the Act.<sup>7</sup> 8

<sup>&</sup>lt;sup>6</sup> See 2000 Biennial Regulatory Review: Spectrum Aggregation Limits for Commercial Mobile Radio Services, Report and Order, FCC 01-328, WT Docket No. 01-14, 16 FCC Rcd 22668 (2001), para. 29.

<sup>&</sup>lt;sup>7</sup> See Section 309(j)(3)(B) promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people <u>by avoiding excessive</u> concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women. (Emphasis supplied)

<sup>&</sup>lt;sup>8</sup> Section 309(j)(4)(B) and (C) "...include performance requirements, such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services;" and

<sup>&</sup>quot;...consistent with the public interest, convenience, and necessity, the purposes of this Act, and the characteristics of the proposed service, prescribe area designations and bandwidth assignments that promote (i) an equitable distribution of licenses and services among geographic areas, (ii) economic opportunity for a wide variety of applicants, including small businesses, rural telephone companies, Continued Next Page

The clearest benefit from adopting our proposed spectrum aggregation limits is to guard against competitive abuses. For example, it would not be unreasonable for one or two incumbent carriers with the deepest pockets to obtain a permanent competitive advantage by acquiring substantially all of the 90 MHz to be auctioned in specific geographic markets. This threat is more likely today than in recent years because of the financial distress and limited access to capital of many of their competitors. Strategic acquisitions made in this way would distort or foreclose wireless competition in ways which are plainly contrary to the Commission's procompetition mandate in Section 309(j) of the Act.

The spectrum aggregation limits we propose also would benefit auction efficiency by giving potential bidders clear guidance regarding the amounts of spectrum which individual licensees will be permitted to acquire so that they can develop auction strategies accordingly. If, as is widely expected to be the case in the auction for 1.7 GHz/2.1 GHz spectrum, numerous incumbent CMRS licensees are expected to bid, there will be situations where the amounts of spectrum acquired in the auction when added to existing spectrum holdings could raise potential competitive issues. Possible bidders deserve to know before the auction whether the Commission's policies promoting competition might be applied to deny them, or any other qualified bidder, grants of licenses for which they may want to bid.

From an administrative perspective there are obvious other advantages if the Commission adopts spectrum aggregation limits as proposed here. The effective

and businesses owned by members of minority groups and women, and (iii) <u>investment in and rapid</u> <u>deployment of new technologies and services.</u>" (Emphasis supplied)

enforcement of the Commission's policies promoting competition are better undertaken before rather than after the auction ... when the Commission's only option is to deny the winning bidder's application for initial licensing. It is not administratively efficient for Commission's limited staff resources to be tied up performing case-by-case reviews, particularly where the participants are likely to be numerous CMRS carriers with significant existing spectrum holdings and market share.

Another adverse consideration is the delay and disruption to business plans which case-by-case review of initial licensing application could cause. By adopting spectrum aggregation limits, the Commission would also avoid delays in the earliest possible deployment of advanced services caused by case-by-case review or litigation while competitive issues are being resolved. It also avoids the need to reauction spectrum in the event a winning bidder ultimately is not granted licenses for some or all of the spectrum won in the auction.

6. The Commission's 1.7 GHz/2.1 GHz Auction Should Include All of the Licenses for the Spectrum in a Single Auction Without Using Package Bidding Procedures or At Least Restricting Package Bidding To REAG or EAG Licenses.

We also strongly support open eligibility and use of simultaneous multipleround auction methodologies for all EA or MSA/RSA licenses without package bidding features.<sup>9</sup> Because the Commission has yet to test its proposed package bidding procedures in any auction, the Commission should consider testing these

<sup>&</sup>lt;sup>9</sup> This approach is consistent with the Commissions decision not to use package bidding for the MSA/RSA and certain REAG licenses in the lower 700 MHz band in Auction #44 and in upcoming Auction #49.

procedures in connection with the licensing of spectrum other than 1.7 GHz/2.1 GHz spectrum, so that the auction for this spectrum is not the first in which this new bidding methodology is used. This will permit the Commission to refine or eliminate its bidding procedures so as to avoid the so-called "threshold problem," which the Commission itself has identified, and thereby diminish the potential under the Commission's current bidding procedures to bias auction results in favor of nationwide or super regional aggregation. However, in the event the Commission chooses to use its new package bidding procedures it should restrict their use to the largest geographic licenses to be auctioned which we propose to be REAG or MEA areas.

#### Conclusion

We have proposed geographic service areas, channel block sizes, spectrum aggregation limits and auction procedures which we believe are well adapted to the uses of 1.7 GHz/2.1 GHz spectrum to enhance the incumbent CMRS operations of both small and large companies and to provide opportunity for new entry. Our proposals meet the diverse and numerous statutory mandates which the Commission must observe under Section 309(j)(3) and (4) of the Act. Our proposals are pro-competitive, enhance rural service, promote rapid deployment of advanced services, eliminate warehousing of spectrum, afford opportunities for a wide variety of applicants and encourage investment in new technologies. We urge the Commission to adopt the rules which we have proposed so that all bidders have

realistic opportunities to bid for licenses which are suited to their needs so that all can participate in the deployment of advanced services which the Commission has already concluded will result in "economic and public policy benefits."

Respectfully submitted,

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